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SUGHRUE MION, PLLC 2100 PENNSYLVANIA AVENUE, N.W. SUITE 800 WASHINGTON, DC 20037			CHEN, QING	
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Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No.	Applicant(s)
	10/685,407	YOOK, HYUNGYOO
	Examiner Qing Chen	Art Unit 2191

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

1) Responsive to communication(s) filed on 16 October 2003.

2a) This action is **FINAL**.                            2b) This action is non-final.

3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

4) Claim(s) 1-30 is/are pending in the application.

4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.

5) Claim(s) \_\_\_\_\_ is/are allowed.

6) Claim(s) 1-30 is/are rejected.

7) Claim(s) \_\_\_\_\_ is/are objected to.

8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

9) The specification is objected to by the Examiner.

10) The drawing(s) filed on 16 October 2003 is/are: a) accepted or b) objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a) All    b) Some \* c) None of:

1. Certified copies of the priority documents have been received.
2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

1) Notice of References Cited (PTO-892)

2) Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 10/16/03, 12/21/04, 10/12/05, 7/7/06

4) Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.

5) Notice of Informal Patent Application (PTO-152)

6) Other: \_\_\_\_\_.

**DETAILED ACTION**

1. This is the initial Office action based on the application filed on October 16, 2003.

**Claims 1-30** are currently pending and have been considered below.

***Information Disclosure Statement***

2. The Office acknowledges receipt of the Information Disclosure Statements filed on October 16, 2003, December 21, 2004, October 12, 2005, and July 7, 2006. They have been placed in the application file and the information referred to therein has been considered by the Examiner.

The Information Disclosure Statements filed on October 12, 2005 and July 7, 2006 fail to comply with 37 CFR 1.98(b)(5) because each publication listed in an information disclosure statement must be identified by publisher, author (if any), title, relevant pages of the publication, date, and place of publication. They have been placed in the application file, but the information referred to therein has not been considered.

Applicant has indicated the Korean Patent Application No. 2000-7007449 and the paper “OSGi Service Platform release 2” in the specification on page 2, paragraph [04] and page 9, paragraph [34], respectively, but fails to disclose the information on an Information Disclosure Statement. The listing of references in the specification is not a proper Information Disclosure Statement. 37 CFR 1.98(b) requires a list of all patents, publications, or other information submitted for consideration by the Office, and MPEP § 609.04(a) states, “the list may not be

incorporated into the specification but must be submitted in a separate paper.” Therefore, unless the references have been cited by the Examiner on form PTO-892, they have not been considered.

### ***Oath/Declaration***

3. The oath or declaration is defective. A new oath or declaration in compliance with 37 CFR 1.67(a) identifying this application by application number and filing date is required. See MPEP §§ 602.01 and 602.02.

The oath or declaration is defective because:

- It is not dated by the inventor.
- It does not identify the mailing address of the inventor. A mailing address is an address at which an inventor customarily receives his or her mail and may be either a home or business address. The mailing address should include the ZIP Code designation. The mailing address may be provided in an application data sheet or a supplemental oath or declaration. See 37 CFR 1.63(c) and 37 CFR 1.76.
- It does not identify the foreign application for patent or inventor's certificate on which priority is claimed pursuant to 37 CFR 1.55, and any foreign application having a filing date before that of the application on which priority is claimed, by specifying the application number and country.

### ***Drawings***

4. Figures 1 and 2 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). Corrected drawings in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application.

The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they include the following reference characters not mentioned in the description:

- Elements 111 and 140 in Figure 1;

- Elements 211, 221, 240, and 250 in Figure 2;
- Element 350 in Figure 3;
- Element 450 in Figure 4;
- Elements 511, 513, 521, 530, and 550 in Figure 5; and
- Elements 600 and 650 in Figure 6;

Corrected drawing sheets in compliance with 37 CFR 1.121(d), or amendment to the specification to add the reference character(s) in the description in compliance with 37 CFR 1.121(b) are required in reply to the Office action to avoid abandonment of the application.

Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the Examiner, the Applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

***Specification***

5. The disclosure is objected to because of the following informalities:

- The specification contains the following typographical errors:
  - The application number "2003-0000058" should be changed to "10-2003-0000058" as indicated on the Korean Patent Application in page 1, paragraph [01].

- The reference number “120” should be changed to “220” in page 3, paragraph [07], line 7, since “220” is used to designate the BAV in Figure 2, whereas “120” is used to designate the BAV in Figure 1.
- The word “elected” should be changed to “selected” in page 5, paragraph [14].
- The term “open service gateway initiative” should be changed to “open services gateway initiative” in page 7, paragraph [29].
- The reference number “531” should be changed to “530” in page 13, line 1, since “530” is used to designate the file server, whereas “531” is used to designate the application file.
- The phrase “application server pull mode” should be changed to “controlled device push mode” in page 15, paragraph [58].
- The period at then end of the paragraph should be placed after the parentheses in page 17, paragraph [64].
- The trademark “Java Beans” should be changed to “JavaBeans” in page 19, paragraph [71].
- The section header for the brief description of the drawings should be labeled “Brief Description of the Drawings” (See MPEP 608.01(a)).
- The explanations of what the acronyms CP and CD stand for should be stated after the first occurrence of the acronyms, which is in page 10, paragraphs [38] and [39].
- The specification does not explain what the acronyms HTTP, URL, CORBA, and DCOM stand for.

Appropriate correction is required.

6. The use of trademarks, such as UPNP, JINI, JAVABEANS, MICROSOFT, WINDOWS, and LINUX, has been noted in this application. Trademarks should be capitalized wherever they appear (capitalize each letter OR accompany each trademark with an appropriate designation symbol, e.g., <sup>TM</sup> or <sup>®</sup>) and be accompanied by the generic terminology (use trademarks as adjectives modifying a descriptive noun, e.g., “the WINDOWS operating system”).

Although the use of trademarks is permissible in patent applications, the proprietary nature of the marks should be respected and every effort made to prevent their use in any manner, which might adversely affect their validity as trademarks.

#### *Claim Objections*

7. **Claim 1** is objected to because of the following informalities:

- **Claim 1** contains the following typographical errors:
  - The white space before the colon (:) in the preamble should be deleted.
  - The phrase “the plurality of the controlled devices” should presumably be read “the plurality of controlled devices” in the second limitation.

Appropriate correction is required.

***Claim Rejections - 35 USC § 112***

8. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

9. **Claims 2, 6, 7, 9, 10, 13, 18, 24, 26, and 29** are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

**Claims 2, 10, 18, and 26** contain the trademarks or trade names UPNP and JINI. When a trademark or trade name is used in a claim as a limitation to identify or describe a particular material or product, the claim does not comply with the requirements of the 35 U.S.C. 112, second paragraph. *Ex parte Simpson*, 218 USPQ 1020 (Bd. App. 1982). The claim scope is uncertain since the trademark or trade name cannot be used properly to identify any particular material or product. A trademark or trade name is used to identify a source of goods, and not the goods themselves. Thus, the use of a trademark or trade name in a claim to identify or describe a material or product (in the present case, specific network architectures) would not only render a claim indefinite, but would also constitute an improper use of the trademark or trade name.

**Claims 6 and 9** recite the limitation “the controlled devices.” There is insufficient antecedent basis for this limitation in the claims. In the interest of compact prosecution, the Examiner subsequently interprets this limitation as reading “each of the controlled devices” for the purpose of further examination.

**Claims 7, 13, and 24** recite the limitation “the controlled devices.” There is insufficient antecedent basis for this limitation in the claims. In the interest of compact prosecution, the Examiner subsequently interprets this limitation as reading “the plurality of controlled devices” for the purpose of further examination.

**Claims 13, 24, and 29** recite the limitation “the controlled device.” There is insufficient antecedent basis for this limitation in the claims. In the interest of compact prosecution, the Examiner subsequently interprets this limitation as reading “a controlled device” for the purpose of further examination.

#### ***Claim Rejections - 35 USC § 102***

10. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

11. **Claims 1, 2, 4-10, 12-18, 20-22, 24-26, 28, and 29** are rejected under 35 U.S.C. 102(b) as being anticipated by Moonen et al. (WO 02/09350).

As per **Claim 1**, Moonen et al. disclose an application management system comprising:

- A. A plurality of controlled devices (*see Figure 1, Elements 104, 106, 108, 112, 114, and 116; Page 2, Lines 19-23; and Page 5, Lines 8-11*); and
- B. An application server performing the installation and management of applications for the plurality of controlled devices by using a framework capable of providing integrated support to a variety of home network middleware (*see Figure 1, Element 118; and Page 5, Lines 26-28*).

As per **Claim 2**, Moonen et al. disclose an application management system **as in Claim 1 above**, and further disclose that the home network middleware is selected from a group consisting of HAVi, UPnP™, Jini™ and HWW (*see Page 7, Lines 9-10*).

As per **Claim 4**, Moonen et al. disclose an application management system **as in Claim 1 above**, and further disclose that each of the controlled devices includes a home network middleware module for communicating with the application server (*see Page 7, Lines 13-15 and 20-22*).

As per **Claim 5**, Moonen et al. disclose an application management system **as in Claim 1 above**, and further disclose that each of the controlled devices includes positional information on an application file to be installed, and the application file is stored in a file server on the Internet (*see Figure 1, Element 124; Figure 3, Element 306; Page 2, Lines 30-33; Page 9, Line 27; and Page 10, Lines 5-6*).

As per **Claim 6**, Moonen et al. disclose an application management system **as in Claim 5 above**, and further disclose that the application server extracts the positional information on the application file from each of the controlled devices and downloads the application file from the file server to install a relevant application in response to the extracted positional information (*see Page 5, Line 34; Page 6, Lines 1-4; and Page 7, Lines 4-6*).

As per **Claim 7**, Moonen et al. disclose an application management system **as in Claim 5 above**, and further disclose that the application server includes a home network middleware module for communicating with the plurality of the controlled devices and extracting the positional information on the application file from the plurality of controlled devices (*see Figure 1, Element 128; and Page 7, Lines 4-8*), an application loader module for downloading the application file from the file server in accordance with the extracted positional information on the application file (*see Figure 1, Element 122; and Page 5, Lines 26-28*), and an application management module for controlling operations of the home network middleware module and the application loader module (*see Figure 1, Element 120; and Page 7, Lines 4-6*).

As per **Claim 8**, Moonen et al. disclose an application management system **as in Claim 7 above**, and further disclose that the home network middleware module and the application loader module are bundled into the framework (*see Figure 1, Elements 118, 120, and 122; Page 5, Lines 24-28 and 34; Page 6, Lines 1-4; and Page 7, Lines 4-8*).

As per **Claim 9**, Moonen et al. disclose an application management system comprising a plurality of controlled devices (*see Figure 1, Elements 104, 106, 108, 112, 114, and 116; Page 2, Lines 19-23; and Page 5, Lines 8-11*) and an application server (*see Figure 1, Element 118; and Page 5, Lines 26-28*), wherein:

- A. A framework capable of providing integrated support to a variety of home network middleware is loaded on the application server (*see Figure 1, Elements 118, 120, and 122; Page 5, Lines 24-28 and 34; Page 6, Lines 1-4; and Page 7, Lines 4-8*); and
- B. Each of the controlled devices controls the application server and performs installation and management of applications for each of the controlled devices (*see Page 8, Lines 16-18 and 21-22*).

As per **Claim 10**, Moonen et al. disclose an application management system comprising a plurality of controlled devices and an application server **as in Claim 9 above**, and further disclose that the home network middleware is selected from a group consisting of HAVi, UPnP™, Jini™ and HWW (*see Page 7, Lines 9-10*).

As per **Claim 12**, Moonen et al. disclose an application management system comprising a plurality of controlled devices and an application server **as in Claim 9 above**, and further disclose that an application file is stored in a file server on the Internet (*see Page 2, Lines 30-33*).

As per **Claim 13**, Moonen et al. disclose an application management system comprising a plurality of controlled devices and an application server **as in Claim 12 above**, and further

disclose that the application server includes a home network middleware module for communicating with the plurality of the controlled devices (*see Figure 1, Element 128; and Page 7, Lines 4-8*), an application loader module for downloading the application files from the file server under the control of a controlled device (*see Figure 1, Element 122; and Page 5, Lines 26-28*), and an application platform service module for controlling operations of the home network middleware module and the application loader module under the control of a controlled device (*see Figure 1, Element 120; and Page 7, Lines 4-6*).

As per **Claim 14**, Moonen et al. disclose an application management system comprising a plurality of controlled devices and an application server as in **Claim 13 above**, and further disclose that the home network middleware module and the application loader module of the application server are bundled into the framework (*see Figure 1, Elements 118, 120, and 122; Page 5, Lines 24-28 and 34; Page 6, Lines 1-4; and Page 7, Lines 4-8*).

As per **Claim 15**, Moonen et al. disclose an application management system comprising a plurality of controlled devices and an application server as in **Claim 9 above**, and further disclose that each of the controlled devices includes a home network middleware module for communicating with the application server (*see Figure 1, Element 128; and Page 7, Lines 4-8*), and an application management module for installing a new application or managing an already installed application by controlling the application server (*see Figure 1, Element 120; and Page 7, Lines 4-6*).

As per **Claim 16**, Moonen et al. disclose an application management system comprising a plurality of controlled devices and an application server **as in Claim 15 above**, and further disclose that the application management module determines a location where a new application file is downloaded and then requests the application server to install the new application (*see Page 7, Lines 4-8*).

As per **Claim 17**, Moonen et al. disclose a method for managing an application using an application management system including a plurality of controlled devices (*see Figure 1, Elements 104, 106, 108, 112, 114, and 116; Page 2, Lines 19-23; and Page 5, Lines 8-11*) and an application server (*see Figure 1, Element 118; and Page 5, Lines 26-28*), comprising the steps of:

1. Detecting connection of the controlled devices with a home network by an application server loaded with a framework capable of providing integrated support to a variety of home network middleware (*see Page 5, Lines 24-26*); and
2. Installing the application necessary for controlling the controlled devices by the application server (*see Page 7, Lines 4-8*).

As per **Claim 18**, Moonen et al. disclose a method for managing an application using an application management system including a plurality of controlled devices and an application server **as in Claim 17 above**, and further disclose that the home network middleware is selected from a group consisting of HAVi, UPnP™, Jini™ and HWW (*see Page 7, Lines 9-10*).

As per **Claim 20**, Moonen et al. disclose a method for managing an application using an application management system including a plurality of controlled devices and an application server **as in Claim 17 above**, and further disclose that the framework provides Internet access services and home network middleware services (*see Page 2, Lines 19-23 and 30-33*).

As per **Claim 21**, Moonen et al. disclose a method for managing an application using an application management system including a plurality of controlled devices and an application server **as in Claim 17 above**, and further disclose that step (1) comprises the steps of:

- A. Extracting positional information on an application file necessary for controlling the controlled devices, by the application server (*see Page 5, Line 34; Page 6, Lines 1-4; and Page 7, Lines 4-6*);
- B. Downloading the application file from the file server in accordance with the extracted positional information by the application server (*see Page 5, Line 34; Page 6, Lines 1-4; and Page 7, Lines 4-6*); and
- C. Executing the downloaded application file and installing a relevant application by the application server (*see Page 7, Lines 4-8*).

As per **Claim 22**, Moonen et al. disclose a method for managing an application using an application management system including a plurality of controlled devices and an application server **as in Claim 21 above**, and further disclose that each of the controlled devices includes the positional information on the application file, and the application file is stored in a file server on

the Internet (*see Figure 1, Element 124; Figure 3, Element 306; Page 2, Lines 30-33; Page 9, Line 27; and Page 10, Lines 5-6*).

As per **Claim 24**, Moonen et al. disclose a method for managing an application using an application management system including a plurality of controlled devices (*see Figure 1, Elements 104, 106, 108, 112, 114, and 116; Page 2, Lines 19-23; and Page 5, Lines 8-11*) and an application server (*see Figure 1, Element 118; and Page 5, Lines 26-28*), comprising the steps of:

1. Searching for the application server with an application platform service module, by a controlled device (*see Page 5, Lines 24-26*); and
2. Controlling the application server to install the application for the plurality of controlled devices, by a controlled device (*see Page 7, Lines 4-8*).

As per **Claim 25**, Moonen et al. disclose a method for managing an application using an application management system including a plurality of controlled devices and an application server **as in Claim 24 above**, and further disclose that the application server is loaded with a framework capable of providing integrated support to a variety of home network middleware (*see Page 2, Lines 19-23*).

As per **Claim 26**, Moonen et al. disclose a method for managing an application using an application management system including a plurality of controlled devices and an application

server as in **Claim 25 above**, and further disclose that the home network middleware is selected from a group consisting of HAVi, UPnP™, Jini™ and HWW (*see Page 7, Lines 9-10*).

As per **Claim 28**, Moonen et al. disclose a method for managing an application using an application management system including a plurality of controlled devices and an application server as in **Claim 25 above**, and further disclose that the framework provides controlled device access services and home network middleware services (*see Page 2, Lines 19-23*).

As per **Claim 29**, Moonen et al. disclose a method for managing an application using an application management system including a plurality of controlled devices and an application server as in **Claim 24 above**, and further disclose that step (2) comprises the steps of:

- A. Determining whether it is necessary to install a new application, by a controlled device (*see Page 5, Line 34; and Page 6, Line 1*);
- B. If it is necessary to install the new application, requesting the application server to install the new application, by a controlled device (*see Page 6, Lines 9-10*);
- C. Downloading a relevant application file from a file server according to the request for installing the new application (*see Page 5, Line 34; Page 6, Lines 1-4; and Page 7, Lines 4-6*); and
- D. Controlling the application server to install the new application, by a controlled device (*see Page 7, Lines 4-8*).

***Claim Rejections - 35 USC § 103***

12. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

13. **Claims 3, 11, 19, and 27** are rejected under 35 U.S.C. 103(a) as being unpatentable over Moonen et al. (WO 02/09350) in view of Elson et al. (US 2003/0014521).

As per **Claim 3**, Moonen et al. disclose an application management system **as in Claim 1 above**. However, Moonen et al. does not explicitly disclose that the framework is an OSGi framework.

In the same field of endeavor, Elson et al. disclose systems and methods for managing and controlling electronic devices on a local network, where the platform software architecture supports, for example, Java™ and OSGi standards directly and eliminates the need for non-standard and proprietary extensions (*see Paragraph [0075]*).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to utilize an OSGi framework in the system of Moonen et al., since the OSGi framework has been used widely to remotely manage applications ranging from mobile phones to open source applications. One would have been motivated to utilize an OSGi framework in order to provide effective provisioning of software to conventional fixed based clients that are equipped with continuous network access (*see Paragraph [0012]*).

As per **Claim 11**, Moonen et al. disclose an application management system comprising a plurality of controlled devices and an application server **as in Claim 9 above**. However, Moonen et al. does not explicitly disclose that the framework is an OSGi framework.

In the same field of endeavor, Elson et al. disclose systems and methods for managing and controlling electronic devices on a local network, where the platform software architecture supports, for example, Java™ and OSGi standards directly and eliminates the need for non-standard and proprietary extensions (*see Paragraph [0075]*).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to utilize an OSGi framework in the system of Moonen et al., since the OSGi framework has been used widely to remotely manage applications ranging from mobile phones to open source applications. One would have been motivated to utilize an OSGi framework in order to provide effective provisioning of software to conventional fixed based clients that are equipped with continuous network access (*see Paragraph [0012]*).

As per **Claim 19**, Moonen et al. disclose a method for managing an application using an application management system including a plurality of controlled devices and an application server **as in Claim 17 above**. However, Moonen et al. does not explicitly disclose that the framework is an OSGi framework.

In the same field of endeavor, Elson et al. disclose systems and methods for managing and controlling electronic devices on a local network, where the platform software architecture

supports, for example, Java™ and OSGi standards directly and eliminates the need for non-standard and proprietary extensions (*see Paragraph [0075]*).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to utilize an OSGi framework in the system of Moonen et al., since the OSGi framework has been used widely to remotely manage applications ranging from mobile phones to open source applications. One would have been motivated to utilize an OSGi framework in order to provide effective provisioning of software to conventional fixed based clients that are equipped with continuous network access (*see Paragraph [0012]*).

As per **Claim 27**, Moonen et al. disclose a method for managing an application using an application management system including a plurality of controlled devices and an application server **as in Claim 25 above**. However, Moonen et al. does not explicitly disclose that the framework is an OSGi framework.

In the same field of endeavor, Elson et al. disclose systems and methods for managing and controlling electronic devices on a local network, where the platform software architecture supports, for example, Java™ and OSGi standards directly and eliminates the need for non-standard and proprietary extensions (*see Paragraph [0075]*).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to utilize an OSGi framework in the system of Moonen et al., since the OSGi framework has been used widely to remotely manage applications ranging from mobile phones to open source applications. One would have been motivated to utilize an OSGi

framework in order to provide effective provisioning of software to conventional fixed based clients that are equipped with continuous network access (*see Paragraph [0012]*).

14. **Claims 23 and 30** are rejected under 35 U.S.C. 103(a) as being unpatentable over Moonen et al. (WO 02/09350).

As per **Claim 23**, Moonen et al. disclose a method for managing an application using an application management system including a plurality of controlled devices and an application server **as in Claim 17 above**, and further disclose that the method comprising an application management step of executing and updating the application installed in the application server (*see Page 4, Lines 16-18; Page 7, Lines 6-8; Page 9, Lines 29-30; and Page 10, Lines 25-26*). However, Moonen et al. does not explicitly disclose that the method comprising an application management step of stopping and deleting the application installed in the application server.

Nevertheless, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate a step of stopping and deleting the application installed in the application server in the system of Moonen et al., since the system of Moonen et al. already incorporates the step of executing and updating of the application installed in the application server. One would have been motivated to incorporate a step of stopping and deleting the application installed in the application server in order to provide full application support for proper maintenance and maximum extensibility.

As per **Claim 30**, Moonen et al. disclose a method for managing an application using an application management system including a plurality of controlled devices and an application server **as in Claim 24 above**, and further disclose that the method comprising an application management step of executing and updating the application installed in the application server (*see Page 4, Lines 16-18; Page 7, Lines 6-8; Page 9, Lines 29-30; and Page 10, Lines 25-26*). However, Moonen et al. does not explicitly disclose that the method comprising an application management step of stopping and deleting the application installed in the application server.

Nevertheless, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate a step of stopping and deleting the application installed in the application server in the system of Moonen et al., since the system of Moonen et al. already incorporates the step of executing and updating of the application installed in the application server. One would have been motivated to incorporate a step of stopping and deleting the application installed in the application server in order to provide full application support for proper maintenance and maximum extensibility.

### *Conclusion*

15. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

A. Shteyn (US 6,618,764) discloses a system and method for enabling networks of possibly different software architectures, such as a HAVi home network and a Home API-based or a JINI-based home network, to cooperate.

B. Aikawa et al. (US 6,654,821) disclose a technology effective for an application wherein an electronic apparatus such as a digital VTR having an IEEE 1394 interface is controlled remotely in an exclusive manner by using another electronic apparatus such as a digital TV or a digital broadcast tuner, which also has an IEEE 1394 interface.

C. Webster et al. (US 6,768,926) disclose a method and device for use in a network over which data may be exchanged among devices, for providing data (executable code unit) for controlling other devices.

D. Motoyama (US 7,058,719) discloses a system and method for setting up a wireless electronic device to join a wireless local area network (LAN).

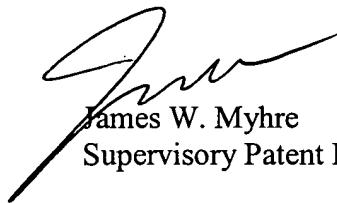
Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Qing Chen whose telephone number is 571-270-1071. The Examiner can normally be reached on Monday through Thursday from 7:30 AM to 4:00 PM. The Examiner can also be reached on alternate Fridays.

If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's supervisor, James W. Myhre, can be reached on 571-270-1065. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR

system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

QC / QC  
July 31, 2006



James W. Myhre  
Supervisory Patent Examiner